

UTAH'S M&I WATER CONSERVATION PLAN



Investing in the Future

July 2003

UTAH'S M&I WATER CONSERVATION PLAN INVESTING IN THE FUTURE

July 14, 2003



By:

Utah Division of Water Resources

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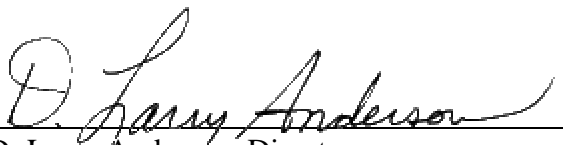

D. Larry Anderson, Director

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INTRODUCTION

Utah is one of the five fastest growing states in the nation, and it shares a border with the four other fastest growing states (see Figure 1). From 1990 to 2000, Utah's population increased by more than 510,000 people to over 2.2 million. In simple terms, Utah's semi-arid terrain is sprouting another city approximately the size of Salt Lake City (1990 population 160,000) about every three years.

According to the Governor's Office of Planning and Budget, Utah's rapid growth will continue, with the population more than doubling to nearly 5 million by 2050. As Utah's population blossoms, so will the demand for Utah's limited water resources. If Utah's municipal and industrial (M&I) water demands increase at the same rate as its population growth, the state is headed for trouble. However, since Utahns currently use more water than they need, particularly in watering their landscapes, the opportunity exists to avoid many of these problems by reducing use to a more efficient level.

Water conservation will play a significant role in helping Utahns use water more efficiently. This increased efficiency will reduce water demands and help water suppliers meet their future needs. In addition to this important benefit, water conservation can also:

- Delay expensive capital investments to upgrade or expand existing water facilities.
- Reduce sewage flows, delaying the need for more wastewater treatment facilities.
- Conserve energy as less water needs to be treated, pumped and distributed to the consumer.

- Lessen the leaching of chemicals and sediments into streams and aquifers.
- Reduce stream diversions, thereby enhancing water quality, environmental and recreational functions.
- Improve water levels in reservoirs.

Few Utahns dispute the value of water conservation; however, there is debate about how it will happen and who is responsible for making sure it does. This document, *Utah's M&I Water Conservation Plan—Investing in the Future*, should help answer many of these questions. In reality, every Utahn is responsible for making it happen; however, the Governor and the Division of Water Resources are committed to doing their part by providing leadership and water conservation resources to the state's water providers.

FIGURE 1
The Nation's Five Fastest Growing States and Growth Rate Rankings of Other Western States



Note: the rankings shown are based on the percentage change in population in the U.S. according to the 1990 and 2000 Census.

The purpose of this document is four-fold: First, it clarifies the state's M&I water conservation goal and how progress toward achieving this goal will be monitored; second, it emphasizes the role water conservation will play in meeting Utah's future water needs; third, and most important, it presents Utah's plan to ensure the state achieves this goal; and fourth, it discusses some of the progress that has been made thus far.

UTAH'S M&I WATER CONSERVATION GOAL

Most new water demands in Utah will occur in the M&I sector as a result of an increasing population. Therefore, the state has developed a specific goal to conserve water use directly linked to M&I needs. This goal is to reduce the 1995 per capita water demand from public community systems¹ by at least 25 percent before 2050. Specifically, per capita demand will need to decline from 321 gallons per capita per day (gpcd) to a sustained 240 gpcd or less. The accomplishment of this goal is equivalent to a total decrease in demand of about 400,000 acre-feet per year by 2050 and represents the most significant component in meeting Utah's future water needs.

The Division of Water Resources has discussed this goal publicly since 1994, but it was not formally published until 2001 when it appeared in the Utah State Water Plan: *Utah's Water Resources—Planning for the Future*. The goal is based on modeling and research that indicates indoor and outdoor water use can reasonably be reduced by 25 percent or more. Indoor reductions will be realized through public education and the installation of more efficient fixtures and appliances. Outdoor reductions will also be realized through public education, along with more efficient application of water on landscapes, and reduction in turf areas.

Establishment of Baseline Water Use

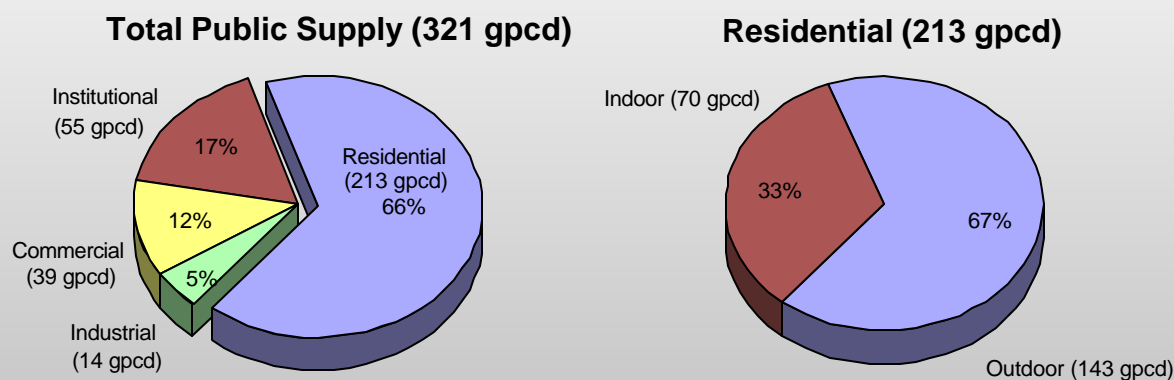
In order to monitor the progress toward achieving the state's water conservation goal, the division has established a baseline water use of 321 gpcd. This is an average statewide value for all potable and secondary water delivered through public community systems, and represents the best estimate for water use in 1995. According to the U.S. Geological Survey, only Nevada (the driest state in the U.S.) used more water per capita than Utah (the second driest state) in 1995.² While Utah's relatively high per capita water use is often compared to the national average of approximately 179 gpcd, a more appropriate comparison would be against the average of other Rocky Mountain states, which is approximately 245 gpcd.³

Figure 2 breaks down the division's estimate for Utah's 1995 total per capita use of publicly supplied water into residential, commercial, institutional and industrial components. Residential use is by far the largest component at about 66 percent or 213 gpcd. As shown on the right, an estimated 143 gpcd, or 67 percent of the residential amount, is used outdoors and 70 gpcd (33 percent) is used indoors.

Monitoring Progress

The Division of Water Resources has established a process to monitor the progress toward achievement of the state's water conservation goal. Currently, M&I water use is collected for several hydrologic river basins every year. This data is stored in a database and published in an M&I water use study for each basin. Every five years, the data from each of these studies will be compiled and a new statewide summary of M&I water use prepared.

FIGURE 2
Breakdown of 1995 Publicly Supplied Water Use Including Secondary Water



(Source: Division of Water Resources, *Municipal and Industrial Water Supply and Uses*, 2000.)

A process to monitor changes in water use during the years between the five-year state-wide summaries has also been established. Specifically, monthly data is collected from several water providers throughout the state and compared against equivalent use for prior years. Although this process will help provide a useful estimate of total water use for the state, the division will rely primarily on the five-year summaries to gage progress toward achieving the goal.

Thus far, the division has completed a second five-year summary, which represents water use for the year 2000, and two interim yearly estimates for 2001 and 2002. The results of these analyses are discussed near the end of this report under the section titled, "Progress Made Thus Far."

WATER CONSERVATION'S ROLE IN MEETING UTAH'S FUTURE WATER NEEDS

Achieving the goal of at least a 25 percent reduction in per capita demand of publicly supplied water will have significant impacts on Utah's future water needs. In the Utah State Water Plan, *Utah's Water Resources—Planning for the Future*, the Division of Water

Resources discusses these impacts. This discussion is repeated below with more specific details provided.

Table 1 estimates the total M&I water demand and supply for each of Utah's major river basins. As shown, the state's 1995 M&I water *demand* is estimated to be approximately 904,000 acre-feet. The 1995 annual M&I water *supply* is estimated to be about 1,165,000 acre-feet, or about 30 percent above demand. Without water conservation, the annual M&I water *demand* would increase to about 1,951,000 acre-feet by the year 2050. The largest increases in demand will occur in the heavily populated basins of the Jordan River, Utah Lake, Weber River, Kanab Creek/Virgin River and Bear River basins. These basins will also be the areas within the state that will benefit the most from water conservation.

If the state is successful in reducing the 1995 per capita water demand of publicly supplied water by 25 percent, it is estimated that M&I water demand in 2050 will be approximately 1,550,000 acre-feet per year (or 400,000 acre-feet less than would otherwise be needed). This cuts the minimum additional supply that would be needed to meet 2050 demand from

TABLE 1
Estimated 1995 and 2050 Total M&I Supply and Demand by Basin

Basin	1995		2050 w/o Conservation	Estimated Conservation (af/yr)*	2050 with Conservation	Minimum Supply Needed (af/yr) [†]
	Demand (af/yr)	Supply (af/yr)	Demand (af/yr)		Demand (af/yr)	
Jordan River	332,000	403,000	651,000	147,000	504,000	101,000
Utah Lake	134,000	174,000	383,000	77,000	306,000	132,000
Weber River	170,000	263,000	358,000	73,000	285,000	22,000
Kanab Creek/Virgin River	42,000	46,000	183,000	44,000	139,000	93,000
Bear River	50,000	74,000	103,000	22,000	81,000	7,000
SE Colorado River	9,000	13,000	12,000	2,000	10,000	0[‡]
Uintah	24,000	33,000	31,000	5,000	26,000	0[‡]
Cedar/Beaver	20,000	23,000	51,000	8,000	43,000	20,000
W Desert	24,000	28,000	53,000	5,000	48,000	20,000
W Colorado	51,000	54,000	62,000	9,000	53,000	0[‡]
Sevier	48,000	54,000	64,000	9,000	55,000	1,000
TOTAL	904,000	1,165,000	1,951,000	401,000	1,550,000	396,000

* Represents 25% reduction in per capita water use of publicly supplied water by the year 2050.

[†] The difference between 2050 Demand with Conservation and 1995 Supply. This represents the minimum amount that will need to be developed by 2050. In reality it will be greater as suppliers build water development projects with the capacity to meet water needs for many years.

[‡] While this basin-wide number indicates no supply deficit, there may be individual communities within the basin who will need to develop additional water.

786,000 acre-feet to 396,000 acre-feet. This deficit will be met by agricultural to M&I water conversions and new water development. Clearly, water conservation will play a very important role in meeting Utah's future water needs.

UTAH'S PLAN TO ENSURE THE WATER CONSERVATION GOAL IS ACHIEVED

The Division of Water Resources has developed a strategy to help ensure the state's goal is achieved. This strategy incorporates various existing planning activities as well as some new programs implemented recently. The main elements of this strategy are listed below:

- 1 - Emphasizing water conservation in State Water Plans**
- 2 - Implementing Board of Water Resources' water conservation policies**
- 3 - Administering the Water Conservation Plan Act**
- 4 - Supporting the Public Information Program of the Governor's Water Conservation Team**
- 5 - Managing the state's Water Education Program**
- 6 - Researching new water conservation technologies and practices**
- 7 - Recommending Best Management Practices for Utah's water providers**
- 8 - Setting the example of efficient water use at state-owned facilities**

The Water Conservation, Education and Use Section within the division is responsible for implementing these strategies. The section's Water Conservation and Education Coordinators play a leading role in these efforts. Each of these activities and programs is discussed in detail below.

1 - Emphasizing Water Conservation in State Water Plans

Wise and efficient use of Utah's water resources has long been a part of the water planning efforts of the Division of Water Resources. Since the legislative authority to provide comprehensive statewide water planning was granted to the division in the 1960s, water conservation has played an important role. This role has been focused and refined over the years as two state water plans and a river basin plan for each of the state's 11 major river basin planning areas have been published. Each of these plans underwent extensive inter-agency and public review and contained specific water conservation recommendations. Final copies of the plans were distributed to universities, local libraries, legislators, water providers, environmental groups and others in the general public who were interested in contributing to the state's various water planning efforts.⁴

The 1990 and 2001 State Water Plans

The *1990 State Water Plan* was the first major publication by the division to contain a thorough discussion of water conservation. This discussion defined water conservation to mean "wise use" and presented several water conservation strategies that could be employed by Utah's water suppliers to increase efficiency. It also discussed prominent issues related to water conservation and made eight concrete recommendations for state policy. These recommendations are repeated below along with a note indicating the efforts that are being made to implement them.⁵

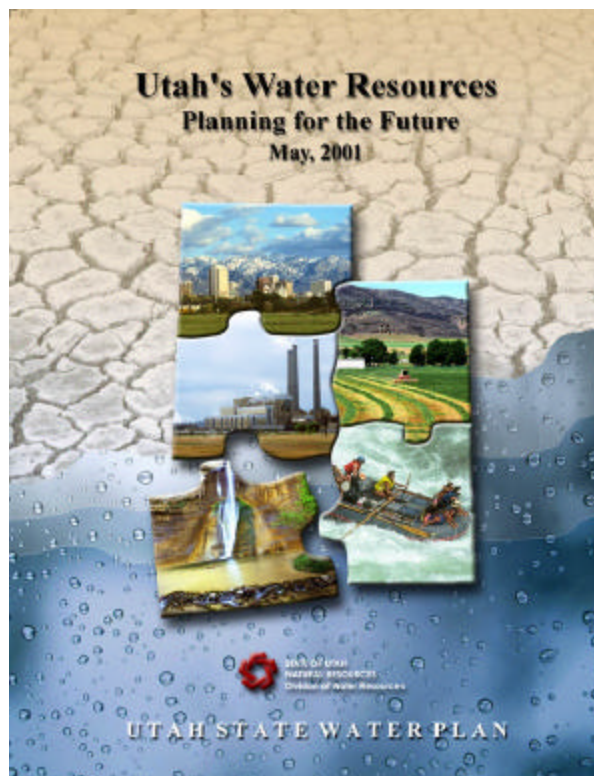


The 1990 State Water Plan discussed prominent issues related to water conservation and made several recommendations for state policy.

- The state should develop methods to assess and improve system operating efficiency and disseminate this information to local water suppliers. *(Through its river basin plans and other documents, the division provides local water suppliers with specific water conservation information and guidelines.)*
- Dual (secondary) water delivery systems should be encouraged if they reduce total M&I use and/or costs. *(The Board of Water Resources provides low-interest loans for secondary irrigation systems.)*
- Irrigation companies and other water user entities should be more aggressive in requesting state and federal agencies to provide educational, technical and financial assistance to help achieve greater irrigation efficiencies. *(The board funds numerous projects to line or enclose canals and ditches and install sprinkler irrigation systems.)*
- Major water suppliers and state agencies should develop specific education

programs promoting water savings. The state should assist local governments in drafting and enacting effective indoor water conservation regulations and enforcement programs, both as general policies and for emergency implementation during droughts. *(The division supports the Public Information Program of the Governor's Water Conservation Team, which aims to educate Utah's citizens about wise indoor and outdoor water use. See strategy number 4 for more information.)*

- The Division of Water Resources should promote studies to provide information to water suppliers concerning price structuring to encourage water conservation. *(The board and division are active proponents of progressive water rates. The board requires project sponsors to adopt a progressive rate structure prior to receiving funds and the division hosts water pricing workshops and provides consultation with interested water providers.)*
- The Utah State University Water Research Laboratory, with advice from water-related agencies, should continue to investigate technological opportunities for water reuse.
- Water suppliers should identify and promote methods for shifting water use from peak periods to other times.
- The Division of Water Resources, in cooperation with other state and local agencies, should expand its water education program in the schools. The program should specifically target water conservation and management methods. *(The division promotes water education in schools and is helping to refine these efforts to reach all of Utah's 4th grade students. See strategy number 5 for more detail.)*



The state's water conservation goal was first published in the 2001 State Water Plan.

In 2001 the Division of Water Resources published the state's second state water plan, *Utah's Water Resources—Planning for the Future*. This document emphasized the importance of water conservation by making it an integral part of the state's plans to meet Utah's growing water needs. The goal to reduce water demand of public community systems by 25 percent by 2050 first appeared in this plan.

In addition to setting a goal to reduce water demand, the 2001 plan presented a detailed discussion of water conservation measures and programs that have proven effective, including:⁶

- Incentive Pricing
- Outdoor Watering Guidelines and Ordinances
- Landscape Guidelines and Ordinances

- Commercial and Residential Water Audits
- Installation of Meters on All Water Connections
- Retrofit, Rebate and Incentive Programs
- Leak Detection and Repair Programs

(All of the above measures are now part of the division's strategy to promote Best Management Practices among water suppliers. See strategy number 7 for more detail.)

River Basin Plans

Following the completion of the 1990 *State Water Plan*, the division prepared a basin plan for each of the state's 11 major river basins.⁷ Each plan followed the general structure of the 1990 plan and contained a chapter dedicated to water conservation. These chapters contained important recommendations to help local water providers implement conservation practices and programs.

Although it is difficult to measure the impact these discussions and recommendations have had at the local level, there is no doubt the importance of water conservation to state policy-makers and water planners has been made known to local officials. The division is currently engaged in the process of updating the

river basin plans, following the outline of the 2001 *State Water Plan*.

The importance of water conservation will continue to be emphasized in the river basin plans and other planning documents. These documents will contain specific recommendations for water providers and citizens throughout the state. If local officials adopt a balanced mixture of the water conservation measures recommended, they will reduce their respective water demands and be better able to satisfy future needs.

2 - Implementing Board of Water Resources' Water Conservation Policies

The Board and Division of Water Resources have long been vocal proponents of water conservation. Evidence of this exists in the strong policies on water conservation that the division has successfully encouraged the board to adopt. This conservation ethic is also apparent in the board's current requirements for water project funding, which include stricter water conservation requirements than any other water funding board in the state. The following pages summarize the water conservation policies of the Board of Water Resources.

In 1982 the board issued the following policy statement:



Each of the River Basin Plans contains a chapter on water conservation with recommendations for local water providers.

“The State supports and promotes the conservation and wise use of water for all beneficial purposes. Water conservation will be given proper and careful consideration in feasibility investigations at all levels and for all projects. It will be examined as both a supplement and an alternative to project proposals.

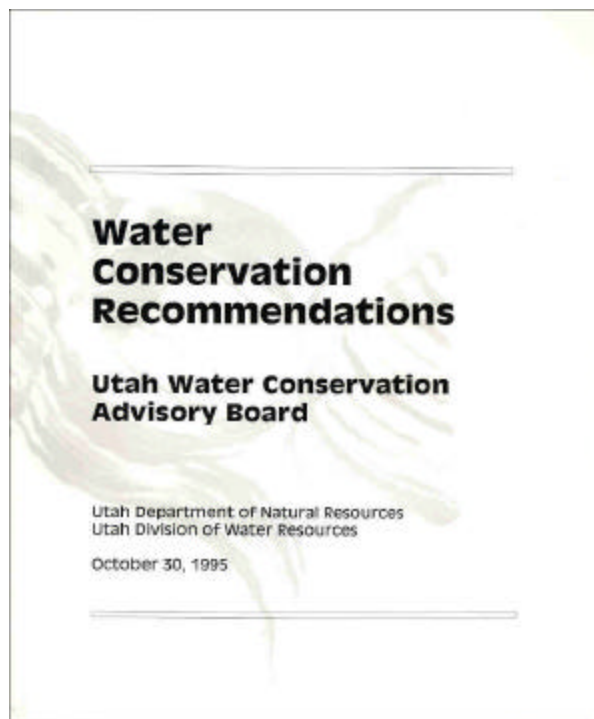
“Sponsors for irrigation projects are encouraged to prepare a conservation plan [...] Sponsors for culinary projects are encouraged to design a conservation plan [...] All project sponsors will be advised to seek assistance from appropriate individuals or organizations to help develop the conservation plan and implement applicable conservation practices and programs for their water projects.”⁸

Since that time, the board has strengthened its water conservation policies and now requires all project sponsors requesting financial assistance to do the following before receiving funds:

- Submit a water management and conservation plan.
- Pass a time-of-day watering ordinance, prohibiting watering between 10 a.m. and 6 p.m.
- Implement a progressive water rate structure, which provides an incentive for customers to reduce their water use.

The division has produced a model water conservation plan as well as a model time-of-day watering and rate ordinance for use by interested entities. These are included in Appendix A and are also available online at: www.conservewater.utah.gov, under the “Agency Resources” section. The division also provides assistance to all project sponsors who need help satisfying the board’s requirements.

In 1992 the Central Utah Project Completion Act was passed by the U.S. Congress and signed into law by the President. This act required the Governor to form a board to “recommend water conservation standards and regulations for promulgation by State or local authorities” within the service area of the Central Utah Project.⁹ This board was to be



In 1995 the Utah Water Conservation Advisory Board published the document, Water Conservation Recommendations.

named the Utah Water Conservation Advisory Board.

Due to the stature of the Board of Water Resources and the support available from the Division of Water Resources’ staff, the Governor appointed all the members of the Board of Water Resources plus an individual representing the Utah Outdoor Interest Coordinating Council to serve on the Utah Water Conservation Advisory Board and make the required recommendations. Accordingly, in 1995 the document titled, *Water Conservation Recommendations*, which provided specific recommendations for implementation, was published. Some of these recommendations are listed below, along with a note indicating the efforts that are being made to implement them:¹⁰

- All water suppliers should develop a water management and conservation plan. State water funding boards

should require a water management and conservation plan from all applicants for state funding of water projects. *(All state water funding boards have since adopted this recommendation.)*

- Water providers should restrict outside watering of landscapes during the hottest hours of the day. *(The Board of Water Resources has adopted this recommendation and the Governor has instructed all state agencies not to water between the hours of 10 a.m. and 6 p.m.; he has also asked all water providers in the state to seriously consider such a measure. See Appendix B for sample letters mailed by the Governor.)*
- All water suppliers should implement metering and periodic reading of meters of municipal and industrial systems. *(Nearly all drinking water systems in the state are now metered.)*
- Each municipal water provider should adopt a water pricing policy that promotes water conservation. *(The Board of Water Resources has adopted this recommendation as a requirement for project sponsors seeking financial assistance.)*
- Local water utilities should set standards for an annual water system accounting that will quantify water system losses and trigger a repair and maintenance program. *(The Division of Water Resources emphasizes the importance of identifying and fixing distribution system leaks in state and river basin plans.)*

The Board of Water Resources will continue to refine and strengthen its water conservation policies and encourage other water funding boards to do likewise. The board and division

will also work with project sponsors to make sure these policies result in meaningful measures being implemented that will likely produce positive results.

3 - Administering The Water Conservation Plan Act

Recognizing the importance of water conservation to Utah's future, the Utah Legislature passed and revised the Water Conservation Plan Act in 1998 and 1999, respectively. This act required water conservancy districts and retailers with more than 500 drinking water connections to prepare a water conservation plan and submit it to the Division of Water Resources by April, 1999. This requirement covered systems that provide water to about 93 percent of Utah's population. The act also stipulates that water conservation plans are to be updated and resubmitted every five years.

As of July 2003, 69 percent (98 out of 143) of the water retailers and conservancy districts in the state that were required to submit plans to the division have done so.¹¹ There are several significant community water suppliers throughout the state that have not yet submitted plans. These suppliers alone represent 22 of Utah's 60 largest communities and provide water to approximately 20 percent of the state's total population.

When the division receives a plan, it is reviewed by staff and evaluated based on its likelihood to produce measurable water conservation results. The division then provides the water supplier with feedback on how the plan can be improved. The division will continue to evaluate plans and provide meaningful comments as well as provide assistance to those water suppliers who need help preparing or updating their plans.

4 - Supporting the Public Information Program of the Governor's Water Conservation Team

The Division of Water Resources provides valuable support for the public information program of the Governor's Water Conservation Team. This program is designed to inform the public by providing water conservation information. As a member of the Governor's Water Conservation Team, the division helps manage a comprehensive water conservation media campaign and distributes printed materials. The division also provides information through a water conservation web page, a water-wise plant tagging program and web page, and water conservation workshops.

Governor's Water Conservation Team

During the summer of 2001, Governor Leavitt called an urgent meeting with Utah's water officials. After discussing the serious nature of the drought and the need for a long-term effort to conserve water, the Governor called for the creation of a committee to coordinate a statewide water conservation campaign. This committee was organized and became the Governor's Water Conservation Team. The team is made up of key water officials from the state's five largest water conservancy and metropolitan water districts, the Director of the Division of Water Resources, a representative from the Governor's Office of Planning and Budget, Rural Water Association of Utah, Utah Water Users Association, and the landscape industry.

The Team's Mission

The mission of the team is to develop a long-term statewide water conservation ethic that will result in a reduction of M&I water use of 25 percent. Building upon the successes and name recognition of Jordan Valley Water Conservancy District's "Slow the Flow" campaign, the team is working together to not only help Utahns get through the drought, but de-

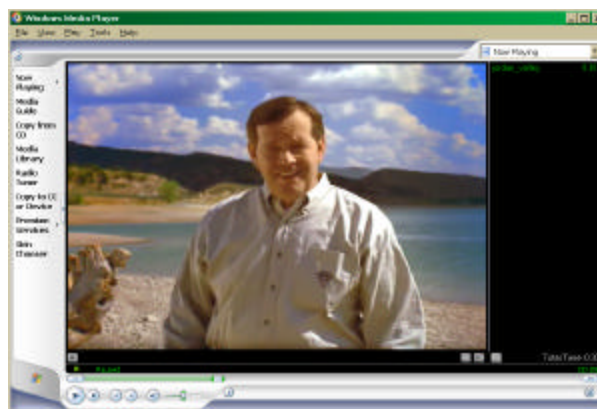
velop a long-term water conservation ethic. The team believes that through its efforts, state and local entities will be better able to communicate a consistent water conservation message to their constituents.

Media Campaign

Thus far, the top priority of the Governor's Water Conservation Team has been the joint funding and production of a statewide media campaign, which includes radio and TV ads, printed materials, and various presentations.

The first group of radio and TV ads included Governor Leavitt as spokesperson and aired during the fall of 2001. Several additional ads were produced for 2002; these aired on KUTV 2 and its affiliated radio stations throughout Utah and featured weatherman Kevin Eubank. One of the 2002 ads won a 23rd Annual Telly Award, which honors outstanding non-network or cable television commercials, video productions and films. All these ads are available online at: **www.conservewater.utah.gov**.

Building upon these successes, the Governor's Water Conservation Team has added some new twists to the 2003 ad campaign. In addition to Governor Leavitt's continued presence as a spokesperson, these ads also include Utah



The Governor's Water Conservation Team's radio and TV ads can be viewed online at: www.conservewater.utah.gov



The Water Conservation Web Page contains numerous tips, recommendations and other resources to help Utahns conserve water.

resident Merlin Olsen, a well-known actor and retired NFL football star.

The Governor's Water Conservation Team has also facilitated the production of various printed materials to support the media campaign. To date, several professional posters and brochures have been produced to help spread the water conservation message to Utah's citizens. Building upon Utah's heritage and the legacy of water resources management in the state, these printed materials reinforce and expand upon the conservation message of the radio and TV ads. Two of the brochures deal with water-wise landscaping and how to efficiently water a landscape and are available for distribution from the team or the Division of Water Resources.

Analysis of the Media Campaign

To gauge the effectiveness of the media campaign, public surveys were conducted after the

2001 and 2002 media campaigns.¹² In the survey conducted at the end of 2002, Utahns were asked if there was a need to conserve water—98 percent responded “yes.” When asked what the most important reason for conserving water was, 42 percent said water was a precious resource that should not be wasted; 23 percent indicated the drought; 19 percent mentioned future growth; and 6 percent said environmental protection. In general, the survey revealed that Utahns understand the importance of water conservation and are willing to do more, but often lack knowledge about how best to conserve.

Water Conservation Web Page – www.conservewater.utah.gov

Over the past few years the public interest in water conservation has grown tremendously. With it has come a demand to disseminate a consistent and effective water conservation message. Recognizing this need, the Division of Water Resources created a water conservation web page to promote effective water conservation habits in Utah and support the Governor's Water Conservation Team. This web page has been online since the spring of 2002 and contains materials of interest to all ages, as well as valuable resources for water agencies.

Founded on the concept that water conservation is easy and can save everyone money, the web page is one of the best resources for individuals who are searching for ways to conserve water. In addition to containing basic

watering recommendations for a typical landscape, the web page includes many ways to conserve water both indoors and outdoors, numerous tips that can be implemented immediately, an indoor water savings calculator, a customizable irrigation calculator that allows an individual to create a watering schedule tailored to their unique sprinkler system and landscape characteristics, and much more.

Since the web page's creation, the Governor's Water Conservation Team has recognized it as a valuable resource. As of 2003, all media campaign materials produced by the team advertise the web page as an additional resource to which Utahns can turn for more information. Conversely, all TV and radio spots from the media campaign are available on the web page. The division will continue to develop and refine content for this web page that will assist the state with its water conservation efforts.

Water-Wise Plant Tagging Program and Web Page – www.waterwiseplants.utah.gov

The Division of Water Resources, in cooperation with USU Extension, Bureau of Reclamation, and numerous other water providers and interested agencies, has helped develop a water-wise plant tagging program to promote the use of native and other well-adapted plants in Utah landscapes. Thus far, this program has distributed approximately 500,000 bright-yellow tags and promotional posters to participating nurseries and garden centers.

The division has also created a web page to support the effort. The web page is designed to help customers identify and select plants for their landscapes; it includes over 300 plant species with pictures and descriptions of water needs,

hardiness and other characteristics. The web site is hosted on the state's Internet domain.

Water Conservation Workshops

During the winter of 2000 and 2001, the Division of Water Resources conducted 16 workshops in communities around the state to introduce water conservation planning concepts. These workshops were well-attended and highlighted ways water suppliers could use water rates as a means to provide conservation incentives to their customers. Since conducting these workshops, several communities around the state have adopted a more progressive water rate structure. These workshops have been a major success and will continue to be conducted along with private consultations to help interested entities with their water conservation efforts.

In addition to these educational workshops, the division and other state and local agencies have co-sponsored several Large Water User Workshops held along the Wasatch Front. Aimed at large commercial and institutional landscapes, these one-day workshops give landscape managers and their crews the opportunity to learn about irrigation system efficiency, plant health and alternatives to turf. Each participant in the workshop receives a complete USU Extension workbook, a full set of water audit catch cups, and a soil probe. These workshops were extremely popular in the summer of 2002, and continue to be well attended.

5 - Managing the State's Water Education Program

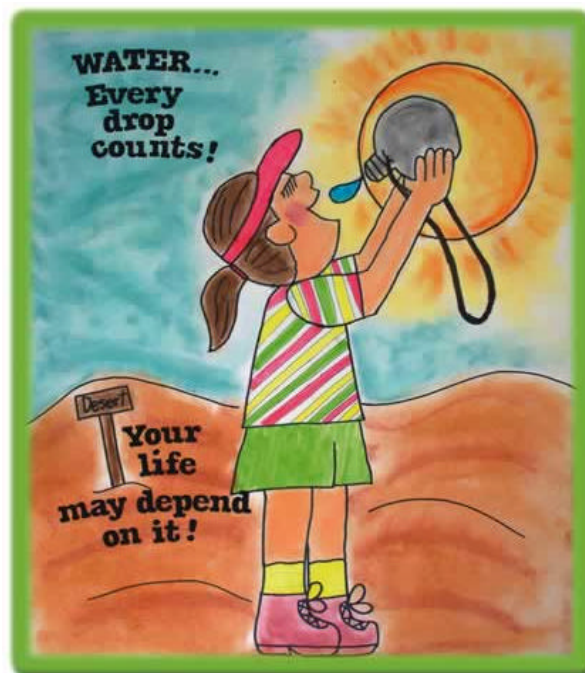
The Division of Water Resources has long promoted an effective water education program for the state of Utah, which includes a strong water conservation component. Effective education is crucial to sustainable demand reduction. An effective program helps teachers and students realize their place in the water



cycle and enables them to make informed decisions about water and how they use it. By developing awareness and knowledge of water resources, the state is equipping the leaders of the future with the skills they will need to make sound water management decisions.

The Water Education Program focuses water education efforts in the following four areas:

- Teacher Education – The division helps train over 450 teachers, providing them with lessons, hands-on experiments and other resources necessary to teach about water and its water use properly. This training was developed by the State Office of Education and is administered by the International Office of Water Science Education.
- Student Outreach – In cooperation with The Living Planet Aquarium and Central Utah Water Conservancy District, the division has helped create the Utah Waters Van. This van is part of the statewide educational outreach program and is equipped with scale models of the water cycle and water use in civilization, indigenous Utah river life, and an evaporation experiment. The program's goal is to reach every 4th grade student in the state within three years.
- The Young Artists' Water Education Poster Contest & Banquet – This contest invites 4th grade students throughout the state to create a poster that describes a water-related theme. The 11 winners from around the state are invited to a banquet where the Grand Prize winner is selected. The contest's purpose is to promote thought and understanding concerning the water cycle.



Fifth grader, Aly VanMeeteren, from Plain City Elementary, created this 2002 Grand Prize winning poster.

- Educational Resources – The division has several additional resources that are available to the public, including:
 - Water Education Web Page: A web page hosted by the division that provides teachers and students with valuable water-related resources, information and activities. This web page can be found at: www.watereducation.utah.gov.
 - Water Follies—A Soak Opera: A 7-minute video that provides a comical look at the ways we waste water. It focuses on society's bad habits and promotes discussion on our individual behavior.
 - Water—A Never Ending Story: A 20-minute video about the water cycle. Its purpose is to educate students about water, helping them to cultivate a water conservation attitude and foster a desire to wisely manage this precious resource.

- *Utah Water—A Precious Resource*: An elementary guide that focuses on the overall use and cycles of water in Utah.

6 - Researching New Water Conservation Technologies and Practices

In order to develop a strong water conservation program for the state and support its recommendations, the Division of Water Resources studies issues related to water conservation. Many of these studies deal with how water conservation practices affect overall water usage. These studies include the following:

- Impact of Conservation and Demographic Trends on Municipal Water Demand (1994)
- Identifying Residential Water Use—Survey Results and Analysis of Residential Water Use for Thirteen Communities in Utah (2001)
- Apartment Indoor Use Study (2002)
- Secondary Water Use Study (Ongoing)
- Water Ordinance Study (Ongoing)
- Turf ET Study (Ongoing)
- Turf Deficit Irrigation Study (Ongoing)

The division is conducting several other studies to evaluate new technologies that may prove useful in helping the state meet its water conservation goal. These studies include the following:

- WeatherTRAK Automatic Timer Study (Ongoing)
- WeatherReach Study (Ongoing)
- Soil Moisture Sensor Controller Study (Ongoing)
- Secondary Meter Research Study (2002)

The division also acts as a clearing house for water conservation studies conducted by other water providers either locally or nationally. The results of these studies are shared with interested entities and help the public make informed decisions regarding water conservation.

7 - Recommending Best Management Practices for Utah's Water Providers

The Division of Water Resources recommends that the state's water providers use the following list of Best Management Practices (BMPs) in their water conservation programs. Water providers should implement a mixture of these practices that is tailored to fit their own unique needs. Broad implementation of these BMPs will help the state achieve its water conservation goal:

BMP 1 - Comprehensive Water Conservation Plans

- Develop a water management and conservation plan as required by law. Plans are to be adopted by the water agency authority (city council, board of directors, etc.) and updated no less than every five years.

BMP 2 - Universal Metering

- Install meters on all residential, commercial, institutional and industrial water connections. Meters should be read on a regular basis.
- Establish a maintenance and replacement program for existing meters.
- Meter secondary water at the most specific level possible, somewhere below source water metering. Individual secondary connection metering should be done as soon as technology permits.



Community water providers may find programs and incentives that help large landscapes conserve water attractive.

BMP 3 - Incentive Water Conservation Pricing

- Implement a water pricing policy that promotes water conservation.
- Charge for secondary water based on individual use levels as soon as technology permits.

BMP 4 - Water Conservation Ordinances

- Adopt an incentive water rate structure.
- Adopt a time-of-day watering ordinance.
- Adopt an ordinance requiring water-efficient landscaping in all new commercial development. This should include irrigation system efficiency standards and an acceptable plant materials lists.
- Adopt an ordinance prohibiting the general waste of water.

(See Appendix A for sample ordinances.)

BMP 5 - Water Conservation Coordinator

- Designate a water conservation coordinator to facilitate water conservation programs.

BMP 6 - Public Information Programs

- Implement a public information program consistent with the recommendations of the Governor's Water Conservation Team. Such programs can be adapted to meet the specific needs of the local area and may use the "Slow the Flow" logo with approval of the division.

BMP 7 - System Water Audits, Leak Detection and Repair

- Set specific goals to reduce unaccounted for water to an acceptable level.
- Set standards for annual water system accounting that will quantify system losses and trigger repair and replacement programs, using methods consistent with American Water Works Association's *Water Audit and Leak Detection* Guidebook.

BMP 8 - Large Landscape Conservation Programs and Incentives

- Promote a specialized large landscape water conservation program for all schools, parks and businesses.
- Encourage all large landscape facility managers and workers to attend specialized training in water conservation.
- Provide outdoor water audits to customers with large amenity landscapes.

BMP 9 - Water Survey Programs for Residential Customers

- Implement residential indoor and outdoor water audits to educate residents on how to save water.

BMP 10 - Plumbing Standards

- Review existing plumbing codes and revise them as necessary to ensure water-conserving measures in all new construction.
- Identify homes, office building and other structures built prior to 1992 and develop a strategy to distribute or install high-efficiency plumbing fixtures such as ultra low-flow toilets, shower-heads, faucet aerators, etc.

BMP 11 - School Education Programs

- Support state and local water education programs for the elementary school system.

BMP 12 - Conservation Programs for Commercial, Industrial and Institutional Customers

- Change business license requirements to require water reuse and recycling in new commercial and industrial facilities where feasible.
- Provide comprehensive site water audits to those customers known to be large water users.
- Identify obstacles and benefits of installing separate meters for landscapes.



In 1992 the Department of Natural Resources renovated its landscape, installing a Xeriscape demonstration garden with a variety of beautiful and water-wise plants.

BMP 13 - Reclaimed Water Use

- Use reclaimed or recycled water where feasible.

8 - Setting the Example of Efficient Water Use at State-Owned Facilities

It is important that the state be a good example of water conservation for its citizens. To help accomplish this, the state recently revised its building guidelines and policies to incorporate water-wise landscapes and more water-efficient appliances at new state facilities. In addition Governor Leavitt has mandated that all state facilities avoid watering between 10 a.m. and 6 p.m.

In 1992 the Division of Water Resources decided to remodel a portion of the existing 2,800 square foot landscape (originally planted in Kentucky Bluegrass) in front of the Department of Natural Resources. Taking out most of the turf and replacing it with water-wise plants has helped demonstrate a good water conservation ethic for all state facilities.

The division also supports state parks and facilities in their efforts to save water. Xeriscape manuals and resources were given to all state parks managers in 2003 and specific water conservation plans were prepared for several parks. Work is currently underway at few state facilities to remodel their old landscapes into beautiful showcases for native plants.

PROGRESS MADE THUS FAR

According to the process described previously, the Division of Water Resources recently completed the first statewide summary of M&I water use since the 1995 baseline was established. This summary includes data that represents an approximate statewide value for the year 2000. According to the data, the 2000 statewide per

capita use of publicly supplied water has declined from the 1995 level of 321 gpcd to 293 gpcd, or nearly 9 percent.

The division has also completed two interim estimates of water use since 2000. The 2001 estimate recorded a decline in water use of about 3 percent from the use estimated for 2000. In 2002 a decline in water use of an additional 9 percent was measured, for a net decrease in M&I water demand of about 12 percent since 2000.

While it is clear the water conservation message is being heard, and Utahns are modifying their habits to become more efficient in their water use, it remains to be seen how much of this reduction is due to the severity of the current drought and how much is the result of permanently changed habits. The division will continue to monitor the situation closely, and will only know the answer to these important questions after several more years of data collection and analysis.

CONCLUSION

Utah is growing rapidly. This growth has prompted legitimate concerns about the state's ability to meet continually increasing M&I water demands with available water supplies. As part of its ongoing state water planning efforts, the Division of Water Resources has identified water conservation as a critical component in overcoming these concerns and helping meet future needs.

The Governor and the Division of Water Resources have set a water conservation goal for the state to make sure water conservation becomes a permanent part of Utah's water use ethic. This goal is to reduce the 1995 per capita water demand from public community systems by at least 25 percent before 2050. To ensure this goal is achieved, the state has developed this water conservation plan. The plan presents the state's water conservation

strategy and articulates some important policies that will help guide the water conservation efforts of water providers throughout the state. This strategy includes the following programs:

- 1) Emphasizing Water Conservation in State Water Plans
- 2) Implementing Board of Water Resources' Water Conservation Policies
- 3) Administering the Water Conservation Plan Act
- 4) Supporting the Public Information Program of the Governor's Water Conservation Team
- 5) Managing the State's Water Education Program
- 6) Researching New Water Conservation Technologies and Practices
- 7) Recommending Best Management Practices for Utah's Water Providers
- 8) Setting the Example of Efficient Water Use at State-Owned Facilities

The Division of Water Resources will update this plan as necessary to gauge the effectiveness of these programs and monitor progress toward achieving the state's goal, the. Each update will provide further information and detail regarding the state's water conservation efforts and what needs to be done to ensure success.

Although it is too early to know exactly how much progress has been made toward achieving the state's water conservation goal, the data collected thus far indicates substantial water savings occurred the past three years (2000-2002). The challenge now is to ensure that Utahns continue to use water efficiently even in times of plenty. The strategies outlined in this plan will help make this possible.

NOTES

¹ A private or publicly owned community water system which provides service to at least 15 connection or 25 individuals year round.

² U.S. Geological Survey, *Estimated Use of Water in the United States in 1995*, USGS Circular Survey No. 1200, (Washington, D.C.: U.S. Dept. of the Interior, 1998), 20-23. The U.S. Geological Survey estimated Nevada's use to be 325 gpcd.

³ Ibid. The 245 gpcd cited is the average of the following western states: Arizona, Colorado, Idaho, New Mexico, Nevada, & Wyoming.

⁴ Copies of these plans are available from the Division of Water Resources or its web site: www.water.utah.gov.

⁵ Utah Division of Water Resources, *1990 State Water Plan*, (Salt Lake City: Department of Natural Resources, 1990), section 17.

⁶ Utah Division of Water Resources, *Utah's Water Resources—Planning for the Future*, (Salt Lake City: Department of Natural Resources, 2001), 28, 33. Copies of this plan can be obtained from the division or by visiting the State Water Plan Web Page: www.water.utah.gov/waterplan/. The online version of the plan contains a clickable index providing the visitor easy access to all of the plan's major topics.

⁷ A copy of each plan is available from the Division of Water Resources or its web site: www.water.utah.gov.

⁸ Utah Division of Water Resources, *State of Utah Water – 1982*, (Salt Lake City: Department of Natural Resources, 1982), 47-48.

⁹ U.S. Congress, *Public Law 102-575*, (Washington D.C.: 1992), Section 207 (f)(1).

¹⁰ Utah Water Conservation Advisory Board, *Water Conservation Recommendations*, (Salt Lake City: Utah Division of Water Resources, 1995), 1-6.

¹¹ For an updated list of systems that have submitted plans to the Division of Water Resources, visit the following web page: <http://www.conservewater.utah.gov/agency/plans/W MCP.html>. All plans are available to the public at the division's office in Salt Lake City.

¹² Spire Communications, "Water Conservation Survey," (Salt Lake City: 2002). These surveys were conducted in January, March and November 2002. Its intent was to measure the effectiveness of the team's media campaign and to reveal Utahns' understanding and perception of water conservation principles.

APPENDIX A

Model Water Rates Ordinance

Model Time-of-Day Watering Ordinance

Model Water Waste Ordinance

Water Rates Ordinance

City
A Municipal Corporation

ORDINANCE NO. _____

AN ORDINANCE AMENDING PROVISION OF THE _____ CITY MUNICIPAL CODE
PERTAINING TO THE SERVICE RATES FOR THE CULINARY WATER SYSTEM.

Section 1. Preamble

- A. WHEREAS, [the City] operates a culinary water system; and
- B. WHEREAS, the city council understands that current water rates are not sufficient for present and future increases in costs of providing water to residents; and
- C. WHEREAS, the city council desires to amend the provision of the _____ city municipal code pertaining the fee for culinary water service; and
- D. WHEREAS, the city council understands the pressing need to use water in a more efficient manner to allow for future sustained growth of the community;

Section 2. Ordaining Clause

NOW, THEREFORE, IT IS ORDAINED BY THE CITY COUNCIL OF _____ CITY,
UTAH:

Section ____ Subsection ____ of the _____ City Municipal Code is hereby repealed and reenacted to read as follows:

Section 3. Culinary Water Rates

The City Manager or his / her designee shall read meters monthly. Each account will be assessed a monthly fee using a daily rate as set forth below. Water service charges shall be collected monthly for each water connection. Service charges will be composed of the following parts:

- A. A basic daily service charge, based upon the size of the meter connection calculated to cover major fixed costs associated with paying debt service, salaries, and other costs of operating and maintaining the water system, which do not vary with the amount of water delivered, is set according to the following schedule:

Meter Size	Daily Service Charge (\$)	Monthly Service Charge (\$)
.75	.33	9.90
1.0	.83	24.90
1.5	1.16	34.80
2.0	1.66	49.80
3.0	4.98	149.40
4.0	10.62	318.60

(Numbers used in this table are hypothetical and are used only to illustrate one methodology)

- B. A charge for all water delivered through the meter, calculated to cover the variable costs of operating and maintaining the water system, which do vary according to the amount of water delivered, is set according to the following schedule:

OPTION 1: INCREASING BLOCK RATE STRUCTURE

(Numbers used in this table are hypothetical and are used only to illustrate one methodology)

Gallons Used	Monthly Service Charge (\$)	Metered Water Rate (\$ / Kgal)
0 – 4,200	9.90	1.00
4,201 – 19,200	9.90	1.50
19,201 – 28,200	9.90	2.00
28,201 – 33,000	9.90	2.50
33,001 – 39,000	9.90	3.00
39,001 – 49,000	9.90	3.50
Over 49,000	9.90	4.00

OPTION 2: SEASONAL BLOCK RATE STRUCTURE

(Numbers used in this table are hypothetical and are used only to illustrate one methodology)

Monthly Service Charge (\$)	Metered Water Rate (\$ / Kgal)	
	Oct - May	Jun - Sep
9.90	1.00	1.50

OPTION 3: ASCENDING BLOCK RATE STRUCTURE

(Numbers used in this table are hypothetical and are used only to illustrate one methodology)

Tier Name	Usage (% of Target)	Metered Water Rate (\$ / Kgal)
Low-Volume	0 – 50%	.75
Conservation	51 – 100%	1.00
Inefficient	101 – 150%	2.00
Excessive	151 – 200%	4.00
Wasteful	Over 200%	8.00

Each customer has a water budget or target, which is based on:

- Lot size
- Number of occupants
- Daily evapotranspiration, totaled for the billing period, as measured at the nearest weather station

Time-of-Day Watering Ordinance

City
A Municipal Corporation

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE MUNICIPAL CODE TO PROMOTE WATER USE EFFICIENCY IN AMENITY LANDSCAPE IRRIGATION.

Section 1. Preamble

- A. WHEREAS, [the City] desires to promote efficient sprinkler irrigation practices for all lawns and landscapes; and
- B. WHEREAS, research has shown that irrigating landscapes only during the hours of 6:00 p.m. to 10:00 a.m. significantly increases irrigation efficiency; and
- C. WHEREAS, conservation of water through more efficient use is in the public interest and enhances the community's economic, environmental, recreational and aesthetic resources; and
- D. WHEREAS, [the City] has the authority to adopt this ordinance pursuant to Utah Code Annotated 10-3-702, and hereby exercises its legislative powers in doing so;

Section 2. Ordaining Clause

NOW THEREFORE, be it ordained by [the City] that the following ordinance be enacted.

Section 3. Time-of-Day Watering Parameters

Sprinkler irrigation of all lawns and landscapes is prohibited between the hours of 10:00 a.m. and 6:00 p.m.

Section 4. Applicability of Time-of-Day Watering Ordinance

The provisions of this ordinance shall apply to all landscapes within the city. This ordinance does not apply in the following situations:

- a. New lawns that require frequent irrigation for establishment purposes within 90 days of planting.

b. Short cycles required for testing, inspecting and maintaining irrigation systems.

c. Other situations as permitted by the city.

Section 6. Penalty

[A section may be added to describe the penalty for violation of this ordinance.]

Section 7. Effective Date

This ordinance shall be effective as of _____ 20____.

Water Waste Ordinance

_____ City
A Municipal Corporation

ORDINANCE NO. _____

AN ORDINANCE AMENDING PROVISION OF THE _____ CITY MUNICIPAL CODE PERTAINING TO THE WASTE OF WATER IN THE CULINARY WATER SYSTEM.

Section 1. Preamble

- A. WHEREAS, [the City] operates a culinary water system; and
- B. WHEREAS, the city council understands that water supplies are not going to continue to increase; and
- C. WHEREAS, the city council understands the pressing need to use water in a more efficient manner to allow for future sustained growth of the community;

Section 2. Ordaining Clause

NOW, THEREFORE, IT IS ORDAINED BY THE CITY COUNCIL OF _____ CITY, UTAH:

Section ____ Subsection ____ of the _____ City Municipal Code is hereby repealed and reenacted to read as follows:

Section 3. Culinary Water Waste

Maintenance of Connected Facilities.

All users of water service shall be required to keep their sprinklers, faucets, valves, hoses and all apparatus connected to the water system in good condition at their own expense and all waterways closed when not in use. When it shall be found that any fixture on the user's premises is broken or not in serviceable condition, the user shall be notified at once of the fact and should said user fail to remedy the defect within thirty (30) days, water service may be discontinued until such apparatus has been inspected by the Water Superintendent or his agent and determined to be in a serviceable condition. Any deposit or prepaid charges on the account of such user shall be forfeited to the City as an inspection and handling fee. After inspection and approval of any required repairs by the Public Works Department, service may be restored pursuant to conditions of this Chapter.

Section 4. Penalty

Service Interruption.

If the Water Superintendent shall determine that a user engages in practices which result in the needless waste of a significant amount of water, and continues to do so after reasonable notice to discontinue said wastefulness has been given, the Superintendent may interrupt water service for up to 24 hours per act of waste. Notice of an interruption made hereunder shall be given at least one day prior to the time at which the interruption occurs. It is a waste of water to permit water to run without making due efforts to conserve the water.

City Council Action.

When referred to the Council, the City Council may consider discontinuing permanently the water service to a wasteful user. If the City Council elects to consider the matter of discontinuance, it shall give notice to the water user of the intention to discontinue his or her water service at least seven (7) days prior to the meeting of the City Council at which such discontinuance is to be considered. The notice shall inform the user of the time and place of the meeting and of the charges that led to the consideration of discontinuance. Said water user shall have opportunity to appear with or without legal counsel and present his or her reasons why the water service should not be discontinued. Upon hearing, the City Council shall notify said user in writing of its determination and if the determination is to discontinue the user's water service, it shall notify said user of the period during which the service will remain discontinued.

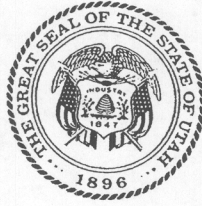
Section 5. Effective Date

This ordinance shall be effective as of _____ 20____.

APPENDIX B

Sample Water Conservation Letters

(These letters were sent by Governor Leavitt
to over 700 major water users throughout the state.)



MICHAEL O. LEAVITT
GOVERNOR

STATE OF UTAH
OFFICE OF THE GOVERNOR
SALT LAKE CITY
84114-0601

OLENE S. WALKER
LIEUTENANT GOVERNOR

April 15, 2002

Mayor Phillip Barker
Alpine City
29 N Main
Alpine UT 84004

Dear Mayor Barker:

We are entering the fourth year of a serious drought in Northern Utah, and Southern Utah is experiencing a severe drought at this time. If we are to have an adequate supply of water in late summer and fall we must conserve.

Once again, I ask you and encourage you to ask your customers to refrain from outdoor watering between the hours of 10 a.m. and 6 p.m. We have adopted this practice at state facilities. Water experts tell us we can reduce water use by 10-15% by following this rule.

In addition, I invite you to join many other Utah communities by considering a time-of-day watering ordinance. I have enclosed a draft time-of-day watering ordinance that has been prepared by the Division of Water Resources that could be adapted to fit your community's needs.

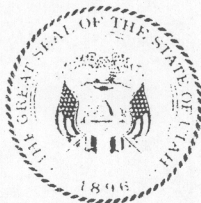
For more information on water conservation, see the state's new water conservation website at www.conservewater.utah.gov. If you have any questions or need assistance with this or other water conservation measures, please feel free to contact the Division of Water Resources at 801-538-7254. Remember, if we each save a little, we will all save a lot.

Sincerely,

Michael O. Leavitt
Governor

Same letter sent to all mayors.

MOL/RLM/DLA
Attachment



MICHAEL O. LEAVITT
GOVERNOR

STATE OF UTAH
OFFICE OF THE GOVERNOR
SALT LAKE CITY
84114-0601

OLENE S. WALKER
LIEUTENANT GOVERNOR

April 16, 2002

President J Bernard Machen
202 Park Building
University of Utah
Salt Lake City UT 84112

Dear President Machen:

We are entering the fourth year of a serious drought in Northern Utah, and Southern Utah is experiencing a severe drought at this time. If we are to have an adequate supply of water in late summer and fall we must conserve.

Once again, I ask you to refrain from outdoor watering between the hours of 10 a.m. and 6 p.m. We have adopted this practice at state facilities. Water experts tell us we can reduce water use by 10-15% by following this rule.

For more information on water conservation, see the state's new water conservation website at www.conservewater.utah.gov. If you have any questions or need assistance with this or other water conservation measures, please feel free to contact the Division of Water Resources at 801-538-7254. Remember, if we each save a little, we will all save a lot.

Sincerely,

Michael O. Leavitt
Governor

Same letter sent to all universities

MOL/RIM/DLA



MICHAEL O. LEAVITT
GOVERNOR

STATE OF UTAH
OFFICE OF THE GOVERNOR
SALT LAKE CITY
84114-0601

OLENE S. WALKER
LIEUTENANT GOVERNOR

April 16, 2002

Supt Patricia Rowse
Tintic School District
Eureka UT 84628

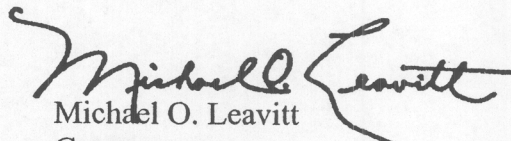
Dear Superintendent Rowse:

We are entering the fourth year of a serious drought in Northern Utah, and Southern Utah is experiencing a severe drought at this time. If we are to have an adequate supply of water in late summer and fall we must conserve.

Once again, I ask you to encourage your schools' maintenance personnel to refrain from outdoor watering between the hours of 10 a.m. and 6 p.m. We have adopted this practice at state facilities. Water experts tell us we can reduce water use by 10-15% by following this rule.

For more information on water conservation, see the state's new water conservation website at www.conservewater.utah.gov. If you have any questions or need assistance with this or other water conservation measures, please feel free to contact the Division of Water Resources at 801-538-7254. Remember, if we each save a little, we will all save a lot.

Sincerely,


Michael O. Leavitt
Governor

Same letter sent to all school districts

MOL/RLM/DLA



MICHAEL O. LEAVITT
GOVERNOR

STATE OF UTAH
OFFICE OF THE GOVERNOR
SALT LAKE CITY
84114-0601

OLENE S. WALKER
LIEUTENANT GOVERNOR

April 16, 2002

James Christensen
Bear River Water Conservancy District
102 W Forest St
Brigham City UT 84302

Dear Mr. Christensen:

We are entering the fourth year of a serious drought in Northern Utah, and Southern Utah is experiencing a severe drought at this time. If we are to have an adequate supply of water in late summer and fall we must conserve.

Once again, I ask you and encourage you to ask your customers to refrain from outdoor watering between the hours of 10 a.m. and 6 p.m. We have adopted this practice at state facilities. Water experts tell us we can reduce water use by 10-15% by following this rule.

In addition, I invite you to join many other Utah districts by considering a time-of-day watering rule for your retail customers. I have enclosed a draft time-of-day watering rule successfully used by the Bountiful Water Subconservancy District that could be adapted to fit your district's needs.

For more information on water conservation, see the state's new water conservation website at www.conservewater.utah.gov. If you have any questions or need assistance with this or other water conservation measures, please feel free to contact the Division of Water Resources at 801-538-7254. Remember, if we each save a little, we will all save a lot.

Sincerely,

Michael O. Leavitt
Governor

Same letter sent to all water conservancy districts

MOL/RLM/DLA
Attachment

